

ABSTRACT OF THE DISCLOSURE

Architectures that enable different types of security devices to operate interchangeably in very large network environments for authentication and metered access to services are described. The system relies on a lease-based access to the network services. The leasing model supports a smart card type payment for services allowing for payments to be automatically forwarded from the smart card type device to the service whenever a service is leased. To lease a service, the requesting service must first be authenticated using devices like cellular phones, smart cards, Personal Data Assistants, or similar devices that have processing and memory capabilities and in some instances, wireless communication capabilities. Services may enter or exit the environment at will. Devices and services in this environment have public certificates that are used for authentication. Services may customize access to its products to make them available only to desired services.